

REMARKS

The resilient fibrous insulation batts and the insulation package of the present invention provide insulation contractors with an insulation package that contains a plurality of both uncut and pre-cut resilient fibrous insulation batts so that the contractor can quickly and easily insulate both standard (e.g. fourteen and one half inch and twenty two and one half inch wide cavities) and nonstandard width wall, ceiling, floor and roof cavities without having to cut the insulation batts at the job site with knives or other cutting tools to size the batts to the nonstandard width wall cavities and without having to unnecessarily handle additional insulation packages. The resilient fibrous insulation batts within the insulation package of the present invention may be faced or unfaced fibrous insulation batts of a pre-selected width (e.g. fifteen inches or twenty three inches), which, preferably, are in a compressed condition. While an insulation package could contain 100% pre-cut resilient fibrous insulation batts, preferably, between 20% and 70% of the resilient fibrous insulation batts in the insulation package are pre-cut resilient fibrous insulation batts and between 30% and 80% of the resilient fibrous insulation batts in the insulation package are uncut resilient fibrous insulation batts. Each of the pre-cut resilient fibrous insulation batts has a plurality of longitudinally extending batt sections separably joined to adjacent batt sections by separable connectors. These separable connectors hold the pre-cut resilient fibrous insulation batt together for handling, but can be easily separated along the lengths of the batt sections by hand to separate one or more of the batt sections from the remainder of the batt sections in the pre-cut resilient fibrous insulation batt. With this structure, a pre-cut resilient fibrous insulation batt can be handled as a unit for insulating a cavity having a width about equal to the width of the pre-cut resilient fibrous insulation batt or easily separated by hand into one or more batt sections at the separable connectors to insulate a cavity having a lesser width. Since the preferred insulation package of the present invention contains between 20% and 70% pre-cut resilient fibrous insulation batts and between 30% and 80% uncut resilient fibrous insulation batts, an insulation contractor using the insulation packages of the present invention to insulate a building can quickly

and easily insulate both the standard and non standard width cavities of the building without having to cut the insulation batts longitudinally to size the batts for cavities of less than a standard cavity width.

Preferably, the batt sections of the pre-cut resilient fibrous insulation batts of the present invention are sized in width so that one or more sections can be separated from the remainder of the batt sections in the pre-cut resilient fibrous insulation batt to form a resilient integral batt having any of a series of selected different widths, from a smallest width of about 1 1/2 to about 3 inches up to a greater width about 1 1/2 to about 3 inches less than the original width of the pre-cut resilient fibrous insulation batt, with the series of selected different widths being in increments that are between about 1 and about 4 inches in width. Preferably, the widths of the selected series of widths for the integral batt formed from the pre-cut fibrous insulation batt predominately differ in width from each other in about 1 to about 2 inch increments. Where the batts are faced, the facings are separable intermediate adjacent batt sections along the lengths of the batt sections and are provided with tabs, intermediate the adjacent batt sections, which extend along the lengths of the batt sections for overlapping the framing members forming the cavity e.g. for securing the facings to the framing members and/or for providing a vapor retarding barrier. Preferably, the cuts in the pre-cut resilient fibrous insulation batt of the present invention only partially sever the pre-cut fibrous insulation batt of the present invention and leave separable connectors between the batt sections that extend for greater than one half the thickness of the fibrous insulation batt and keep the adjacent batt sections from flopping about or pivotally opening up relative to each other when the batt is handled so that the pre-cut fibrous insulation batt can be easily handled by the installer prior to and during installation. In addition, preferably, the resilience of the batts and the separable connectors of the cuts cause the cuts to remain closed so that the cuts do not provide thermal bridges through the batt after installation.

Claims 1 to 33 and 54 to 63 have been rejected under 35 USC 103(a) as being unpatentable over Weinstein et al (6,165,305) in view of Berdan (5,350,063) and further in view of Allwein et al (5,817,387).

Weinstein et al disclose a pre-cut fibrous insulation batt made up of a plurality of batt sections. As shown in Figures 3 and 5, the batt sections 38, 40 and 42 are formed by cuts 34, 36 and batt sections 138, 140 and 142 are formed by cuts 134, 136. The cuts 34, 36 and 134, 136 are continuous and extend in from a major surface of the batt to leave connectors adjacent the opposite major surface of the batt that join the batt

sections together. Preferably, the connectors are only about one-quarter of an inch thick and since the connectors are located adjacent one of the major surfaces of the batt, the adjacent batt sections of the batt are free to flop or pivot open relative to each other during handling. This makes the handling of such batts more difficult than they would otherwise be if the batt sections were held together by connectors that prevented the batt sections from flopping or pivoting open relative to each other during handling. Weinstein et al disclose that it is common for 50% or more of the framing members in the exterior walls of residential structures to be spaced apart at nonstandard distances less than the standard spacing between such framing members. However, even though Weinstein issued about six years after Berdan, Weinstein et al do not disclose or suggest packaging uncut and pre-cut fibrous insulation batts together in a package to facilitate the insulation of both standard width and non-standard width cavities by an installer without the need to cut batts longitudinally at the job site by providing the installer with uncut batts for insulating standard width cavities and pre-cut batts for insulating non-standard width cavities.

Berdan discloses an insulation shipping package for compressible insulation products that comprises at least two insulation package units. However, Berdan does not disclose or suggest packaging uncut and pre-cut fibrous insulation batts together in a package to facilitate the insulation of both standard width and non-standard width cavities by an installer without the need to cut batts longitudinally at the job site by providing the installer with uncut batts for insulating standard width cavities and pre-cut batts for insulating non-standard width cavities.

Allwein et al disclose encapsulated insulation batt assemblies 20 that include an insulation material encapsulated within an envelope 26. The ends of insulation batt assemblies 20 are joined together by the encapsulating sheet material that forms the envelope. Allwein et al do not disclose or suggest pre-cut fibrous insulation batts such as those of the present invention where the batt sections are formed by longitudinal cuts in the batt and the batt sections are separably held together by separable connectors formed in the fibrous batt by the cuts. Nor do Allwein et al disclose or suggest packaging uncut and pre-cut fibrous insulation batts together within a package to facilitate the insulation of both standard width and non-standard width cavities by an installer without the need to cut batts longitudinally at the job site by providing the installer with uncut batts for insulating standard width cavities and pre-cut batts for insulating non-standard width cavities.

Claims 1 to 16 define an insulation package, such as the insulation package shown in Figures 1 and 2, containing both uncut and pre-cut fibrous insulation batts. More specifically, claim 1 and dependent claims 2 to 16 define an insulation package that includes a plurality of uncut and pre-cut resilient fibrous insulation batts in a stack. Each of the pre-cut fibrous insulation batts has a plurality of longitudinally extending batt sections formed in the pre-cut fibrous insulation batt by a plurality of longitudinally extending cut means spaced inwardly from lateral edges of the fibrous insulation batt and located intermediate the batt sections of the fibrous insulation batt. Each of the cut means is closed to prevent the formation of thermal bridges in the direction of the thickness of the fibrous insulation batt and the batt sections are separably joined to adjacent batt sections by separable connector means that extend along the length of the pre-cut fibrous insulation batt for holding the pre-cut fibrous insulation batt together for handling. Each separable connector means is separable by hand to separate adjacent batt sections whereby the pre-cut fibrous insulation batt can be handled as a unit for insulating a cavity having a width about equal to the width of the pre-cut fibrous insulation batt or separated by hand into batt sections at one or more of the separable connector means for insulating a cavity having a lesser width. The stack of resilient fibrous insulation batts contained within the package includes between 20% and 70% pre-cut fibrous insulation batts and between 30% and 80% uncut fibrous insulation batts. The stack of resilient fibrous insulation batts is compressed in a direction perpendicular to the major surfaces of the insulation batts in the stack and the stack of resilient fibrous insulation batts is enveloped within a covering to form the package containing both uncut and pre-cut resilient fibrous insulation batts.

Weinstein et al, Berdan, and Allwein et al do not disclose or suggest an insulation package containing a stack of both uncut and pre-cut resilient fibrous insulation batts. Nor do Weinstein et al, Berdan, and Allwein disclose or suggest an insulation package containing a stack of both uncut and pre-cut resilient fibrous insulation batts wherein the stack of resilient insulation batts contained within the package includes between 20% and 70% pre-cut fibrous insulation batts and between 30% and 80% uncut fibrous insulation batts. Since the insulation package of the present invention contains between 20% and 70% pre-cut resilient fibrous insulation batts and between 30% and 80% uncut resilient fibrous insulation batts, an insulation contractor using the insulation packages of the present invention to insulate a building can quickly and easily insulate both the standard and non standard width cavities of the building without having to cut the

insulation batts longitudinally at the job site to size the batts for cavities of less than a standard cavity width and without having to unnecessarily handle additional insulation packages. Since Weinstein et al, Berdan, and Allwein et al neither disclose nor suggest such an insulation package, the withdrawal of the rejection of claims 1 to 16 as being unpatentable over Weinstein et al, Berdan, and Allwein et al is solicited and the allowance of claims 1 to 16 is requested.

Claims 17 to 32 define an insulation package, such as the insulation package shown in Figure 3, containing both uncut and pre-cut fibrous insulation batts. More specifically, claim 17 and dependent claims 18 to 32 define a unitized insulation package that includes a plurality of insulation packages bound together as a unit. Each of the individual insulation packages in the unitized insulation package comprises a plurality of resilient fibrous insulation batts in a stack and a covering that envelops the stack of batts. The resilient fibrous insulation batts contained in a first set of the insulation packages contained within the unitized insulation package are uncut resilient fibrous insulation batts. The resilient fibrous insulation batts contained in a second set of the insulation packages contained within the unitized insulation package are pre-cut resilient fibrous insulation batts. Each of the pre-cut fibrous insulation batts in the second set of insulation packages has a plurality of longitudinally extending batt sections formed in the pre-cut fibrous insulation batt by a plurality of longitudinally extending cut means spaced inwardly from lateral edges of the fibrous insulation batt and located intermediate the batt sections of the fibrous insulation batt. Each of the cut means is closed to prevent the formation of thermal bridges in the direction of the thickness of the fibrous insulation batt and the batt sections are separably joined to adjacent batt sections by separable connector means that extend along the length of the pre-cut fibrous insulation batt for holding the pre-cut fibrous insulation batt together for handling. Each separable connector means is separable by hand to separate adjacent batt sections whereby the pre-cut fibrous insulation batt can be handled as a unit for insulating a cavity having a width about equal to the width of the pre-cut fibrous insulation batt or separated by hand into batt sections at one or more of the separable connector means for insulating a cavity having a lesser width. The first set of insulation packages containing the pre-cut fibrous insulation batts forms between 30% and 80% of the insulation packages in the unitized package and the second set of insulation packages containing the uncut fibrous insulation batts forms between 20% and 70% of the insulation packages in the unitized package.

Weinstein et al, Berdan, and Allwein et al do not disclose or suggest a unitized insulation package containing both packages of uncut and pre-cut resilient fibrous insulation batts that are bound together. Nor do Weinstein et al, Berdan, and Allwein disclose or suggest a unitized insulation package containing both packages of uncut and pre-cut resilient fibrous insulation batts wherein the insulation packages contained within the unitized package include between 20% and 70% packages of pre-cut fibrous insulation batts and between 30% and 80% packages of uncut fibrous insulation batts. Since the unitized insulation package of the present invention contains between 20% and 70% pre-cut resilient fibrous insulation batts and between 30% and 80% uncut resilient fibrous insulation batts, an insulation contractor using the unitized insulation packages of the present invention to insulate a building can quickly and easily insulate both the standard and non standard width cavities of the building without having to cut the insulation batts longitudinally at the job site to size the batts for cavities of less than a standard cavity width and without having to unnecessarily handle additional insulation packages. Since Weinstein et al, Berdan, and Allwein et al neither disclose nor suggest such a unitized insulation package, the withdrawal of the rejection of claims 17 to 32 as being unpatentable over Weinstein et al, Berdan, and Allwein et al is solicited and the allowance of claims 17 to 32 is requested.

Claim 33 and dependent claims 54 to 63 define pre-cut fibrous insulation batts such as shown in Figures 10 to 15. More specifically claim 33 and dependent claims 54 to 63 define a pre-cut fibrous insulation batt that includes a resilient fibrous insulation batt. The pre-cut fibrous insulation batt has a plurality of longitudinally extending batt sections formed in the fibrous insulation batt by a plurality of longitudinally extending cut means spaced inwardly from lateral edges of the fibrous insulation batt and located intermediate the batt sections of the fibrous insulation batt. Each of the cut means includes a series of cuts passing from the first major surface to the second major surface of the fibrous insulation batt that are closed by the resilience of the fibrous insulation batt to prevent a formation of thermal bridges in the direction of the thickness of the fibrous insulation batt. The batt sections are separably joined to adjacent batt sections by separable connector means that extend along the length of the fibrous insulation batt to hold the fibrous insulation batt together for handling. Each separable connector means is separable by hand to separate adjacent batt sections whereby the fibrous insulation batt can be handled as a unit for insulating a cavity having a width about equal to the width of the fibrous insulation batt or separated by hand into batt sections at one or more

of the separable connector means for insulating a cavity having a lesser width. Each of the separable connector means is a series of separable batt connectors that extend for greater than one half of the thickness of the fibrous insulation batt and that are separated and formed by one of the series of cuts. Since, unlike Weinstein et al, the series of separable batt connectors extend for greater than one half the thickness of the fibrous insulation batt, the connectors do not function as hinges to permit the sections to flop about or open up relative to each other. The fibrous insulation batt is between about 10 inches and 24 inches in width and successive batt sections of the batt sections of the fibrous insulation batt have widths such that, by separating at least one batt section from the fibrous insulation batt, an integral batt can be formed having any of a series of selected widths that range from a width of about 1½ to 3 inches to a greater width less than the width of the fibrous insulation batt and that differ in width in increments that are between about 1 inch and about 4 inches in width.

Neither Berdan nor Allwein et al disclose a pre-cut fibrous insulation batt with longitudinally extending batt sections separably joined together by longitudinally extending separable connector means formed by cuts in the batt. Weinstein et al disclose a pre-cut fibrous insulation batt made up of a plurality of batt sections. As shown in Figures 3 and 5, the batt sections 38, 40 and 42 are formed by cuts 34, 36 and batt sections 138, 140 and 142 are formed by cuts 134, 136. The cuts 34, 36 and 134, 136 are continuous and extend in from a major surface of the batt to leave connectors adjacent the opposite major surface of the batt that join the batt sections together. Preferably, the connectors are only about one-quarter of an inch thick and since the connectors are located adjacent one of the major surfaces of the batt, the adjacent batt sections of the batt are free to flop or pivot open relative to each other during handling. This makes the handling of such batts more difficult than they would otherwise be if the batt sections were held together by connectors that prevented the batt sections from flopping or pivoting open relative to each other during handling. Weinstein et al does not disclose or suggest a batt with batt sections that are formed by a series of cuts passing from the first major surface to the second major surface of the fibrous insulation batt nor a batt wherein each separable connector means joining the batt sections is a series of separable batt connectors, separated and formed by one of the series of cuts, that extend for greater than one half of the thickness of the fibrous insulation batt so that the batt sections are not free to flop or pivot open relative to each other while being handled. Since Weinstein et al, Berdan, and Allwein et al neither disclose nor suggest such a pre-

cut fibrous insulation batt, the withdrawal of the rejection of claims 33 and 54 to 63 as being unpatentable over Weinstein et al, Berdan, and Allwein et al is solicited and the allowance of claims 33 and 54 to 63 is requested.

Respectfully submitted,



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